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SPACE OPERATIONS CONTROL CENTER SATELLITE SITUATION REPORT

VOL. 3, NO. 8

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APRIL 10, 1963



GODDARD SPACE FLIGHT CENTER

GREENBELT, MD.

SPACE OPERATIONS CONTROL CENTER
GODDARD SPACE FLIGHT CENTER
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

VOLUME 3 NO. 8

APRIL 10, 1963

SATELLITE SITUATION REPORT

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY THE
GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHYSICAL
OBSERVATORY AS OF 1430Z ON APRIL 10, 1963.

OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)	
1958 LAUNCHES									
ALPHA 1	EXPLORER 1	US	1 FEB	105.1	33.19	1668	343	108.023 &	
BETA 1	ROCKET BODY	US	17 MAR	138.2	34.25	4330	640		
BETA 2	VANGUARD 1	US	17 MAR	133.9	34.25	3937	660		
1959 LAUNCHES									
ALPHA 1	VANGUARD 2	US	17 FEB	125.3	32.86	3281	563	1.315AU 0.9766AU 1.142AU 0.9871AU 558 534	
ALPHA 2	ROCKET BODY	US	17 FEB	129.6	32.91	3664	561		
ETA 1	VANGUARD 3	US	18 SEP	129.7	33.32	3699	536		
MU 1*	LUNIK 1	USSR	2 JAN	44.9D	0.01				
NU 1*	PIONEER 4	US	3 MAR	398D	1.30				
IOTA 1	EXPLORER 7	US	13 OCT	101.1	50.30	1069	558		
IOTA 2	ROCKET BODY	US	13 OCT	100.9	50.28	1073	534		
1960 LAUNCHES									
ALPHA 1*	PIONEER 5	US	11 MAR	312D	3.35	0.995AU	0.8061AU	0.8061AU 697 684 614 706 360 479 260 450 617 616 616 1441 1509 1519 INSUFFICIENT OBSERVATIONS 1671 1549	
BETA 1	ROCKET BODY	US	1 APR	99.0	48.36	737	697		
BETA 2	TIROS 1	US	1 APR	99.1	48.36	757	684		
BETA 3	NONE	US	1 APR	97.8	48.48	702	614		
BETA 4	NONE	US	1 APR	99.8	48.15	801	706		
GAMMA 2	TRANSIT 1B	US	13 APR	94.2	51.23	609	360		
GAMMA 4	NONE	US	13 APR	96.7	51.25	731	479		
EPSILON 3	NONE	USSR	15 MAY	92.2	64.97	502	260		
ZETA 1	MIDAS 2	US	24 MAY	94.2	33.04	524	450		
ETA 1	TRANSIT 2A	US	22 JUN	101.6	66.71	1054	617		
ETA 2	GREB	US	22 JUN	101.6	66.72	1052	616		
ETA 3	ROCKET BODY	US	22 JUN	101.4	66.68	1034	616		
IOTA 1	ECHO 1	US	12 AUG	115.4	47.19	1513	1441		
IOTA 2	ROCKET BODY	US	12 AUG	118.0	47.23	1679	1509		
IOTA 3	METAL OBJECT	US	12 AUG	118.2	47.22	1685	1519		
IOTA 4	METAL OBJECT	US	12 AUG	INSUFFICIENT OBSERVATIONS					
IOTA 5	METAL OBJECT	US	12 AUG	118.3	47.28	1671	1549		

OBJECT	OBJECTS IN ORBIT					TRANSMITTING FREQ. (MC/S)	
	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI- NATION		APOGEE Km.
1960 LAUNCHES							
NU 1	COURIER 1B	US	4 OCT	106.9	28.34	1209	969
NU 2	ROCKET BODY	US	4 OCT	106.4	28.23	1224	911
XI 1	EXPLORER 8	US	3 NOV	112.3	49.96	2250	425
XI 2	ROCKET BODY	US	3 NOV	112.0	49.96	2228	416
XI 3	NONE	US	3 NOV	109.9	49.37	2045	404
XI 4	NONE	US	3 NOV	111.0	50.51	2118	429
PI 1	TIROS 2	US	23 NOV	98.2	48.49	739	610
PI 2	ROCKET BODY	US	23 NOV	98.1	48.48	738	601
PI 3	NONE	US	23 NOV	98.1	48.52	728	615
PI 4	NONE	US	23 NOV	98.2	48.45	713	643
1961 LAUNCHES							
ALPHA 1	SAMOS 2	US	31 JAN	94.8	97.42	546	468
ALPHA 2	METAL OBJECT	US	31 JAN	94.8	97.43	536	472
GAMMA 1*	VENUS PROBE	USSR	12 FEB	300D	0.58	1.0190AU	0.7183AU
DELTA 1	EXPLORER 9	US	16 FEB	117.0	38.89	2525	582
DELTA 2	ROCKET BODY	US	16 FEB	118.4	38.83	2597	632
DELTA 3	NONE	US	16 FEB	INSUFFICIENT OBSERVATIONS			
KAPPA 1	EXPLORER 10	US	25 MAR	POSITION UNCERTAIN			
NU 1	EXPLORER 11	US	27 APR	107.9	28.79	1785	492
OMICRON 1	TRANSIT 4A	US	29 JUN	103.8	66.81	995	883
OMICRON 2	INJUN -SR- 3	US	29 JUN	103.8	66.81	997	883
OMICRON 3-186**	METAL OBJECTS	US	29 JUN				
RHO 1	TIROS 3	US	12 JUL	100.3	47.89	833	723
RHO 2	ROCKET BODY	US	12 JUL	100.3	47.88	798	753
RHO 3	METAL OBJECT	US	12 JUL	98.8	47.92	791	617
RHO 4	METAL OBJECT	US	12 JUL	101.9	47.82	948	759
SIGMA 1	MIDAS 3	US	12 JUL	161.5	91.22	3575	3314
SIGMA 3	METAL OBJECT	US	12 JUL	161.2	91.16	3550	3312
SIGMA 4	METAL OBJECT	US	12 JUL	161.9	91.17	3569	3353
UPSILON 1	EXPLORER 12	US	16 AUG	INSUFFICIENT OBSERVATIONS			
A DELTA 1	MIDAS 4	US	21 OCT	166.0	95.87	3762	3489

OBJECT	OBJECTS IN ORBIT					TRANSMITTING FREQ. (MC/S)	
	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI- NATION		
							APOGEE Km.
1961 LAUNCHES							
A DELTA 3	METAL OBJECT	US	21 OCT	165.6	95.85	3717	3502
A DELTA 4	METAL OBJECT	US	21 OCT	166.4	95.87	3770	3515
A ETA 1	TRANSIT 4B	US	15 NOV	105.6	32.43	1114	948
A ETA 2	TRAAC	US	15 NOV	105.6	32.44	1114	950
A ETA 3	ROCKET BODY	US	15 NOV	105.5	32.42	1111	938
1962 LAUNCHES							
ALPHA 1*	RANGER 3	US	26 JAN	406.4D	.3988	1.163AU	0.9839AU
ALPHA 2	ROCKET BODY	US	26 JAN	INSUFFICIENT OBSERVATIONS			
BETA 1	TIROS 4	US	8 FEB	100.3	48.27	846	706
BETA 2	ROCKET BODY	US	8 FEB	101.3	48.14	938	708
BETA 3	METAL OBJECT	US	8 FEB	99.4	48.41	762	705
BETA 4	METAL OBJECT	US	8 FEB	100.2	48.26	832	715
ZETA 1	ORB.SOL.OBS. 1	US	7 MAR	95.9	32.83	591	549
ZETA 2	ROCKET BODY	US	7 MAR	95.9	32.84	589	555
ETA 1		US	7 MAR	90.4	90.88	371	213
IOTA 1	COSMOS 2	USSR	6 APR	94.4	48.59	796	187
KAPPA 1		US	9 APR	153.0	86.67	3415	2780
KAPPA 3		US	9 APR	152.7	86.64	3366	2798
KAPPA 4		US	9 APR	153.4	86.59	3401	2822
MU 2	ROCKET BODY	US	23 APR	INSUFFICIENT OBSERVATIONS			
OMICRON 1	ARIEL	US/UK	26 APR	100.7	53.87	1190	396
OMICRON 2	ROCKET BODY	US/UK	26 APR	100.6	53.88	1186	397
SIGMA 1		US	15 MAY	92.4	82.32	499	277
UPSILON 1	COSMOS 5	USSR	28 MAY	91.6	48.97	535	178
OMEGA 1		US	18 JUN	91.5	82.13	358	332
A ALPHA 1	TIROS 5	US	19 JUN	100.4	58.07	980	583
A ALPHA 2	ROCKET BODY	US	19 JUN	100.4	58.07	972	583
A ALPHA 3	METAL OBJECT	US	19 JUN	101.7	58.17	1093	590
A ALPHA 4	METAL OBJECT	US	19 JUN	99.1	57.97	868	565
A EPSILON 1	TELSTAR 1	US	10 JUL	157.7	44.80	5637	955
A EPSILON 2	ROCKET BODY	US	10 JUL	157.6	44.83	5627	952
							136.234;136.923

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCL - NATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES								
A XI 1	COSMOS 8	USSR	18 AUG	91.1	48.94	430	235	
A OMICRON 1		US	23 AUG	99.6	98.63	861	611	
A OMICRON 2		US	23 AUG	98.3	98.64	753	599	
A OMICRON 3		US	23 AUG	100.9	98.62	981	613	
A OMICRON 4		US	23 AUG	99.6	98.64	860	612	
A RHO 1*	MARINER 2	US	27 AUG	348D	1.66	1.229AU	0.7046AU	
A RHO 2	ROCKET BODY	US	27 AUG					
A UPSILON 1		US	1 SEP	93.6	82.82	600	299	
A PSI 1	TIROS 6	US	18 SEP	98.7	58.29	716	681	136.233; 136.922
A PSI 2	ROCKET BODY	US	18 SEP	98.7	58.28	714	677	
A PSI 3	METAL OBJECT	US	18 SEP	99.4	58.44	762	697	
A PSI 4	METAL OBJECT	US	18 SEP	98.0	58.19	688	642	
B ALPHA 1	ALLOUETTE	CANADA	29 SEP	105.5	80.45	1040	993	136.979; 136.593 \$
B ALPHA 2	ROCKET BODY	US	29 SEP	105.5	80.46	1034	994	
B ALPHA 3	METAL OBJECT	US	29 SEP	105.4	80.56	1022	1000	
B ALPHA 4	METAL OBJECT	US	29 SEP	105.5	80.44	1037	997	
B GAMMA 1	EXPLORER 14	US	2 OCT	2184.6	37.36	97536	1252	136.440
B GAMMA 2	ROCKET BODY	US	2 OCT	INSUFFICIENT OBSERVATIONS				
B ETA 1	RANGER 5	US	18 OCT	370D	.44422	1.0681AU	0.9498AU	
B ETA 2	ROCKET BODY	US	18 OCT					
B KAPPA 1		US	26 OCT	144.6	71.41	5294	195	
B LAMBDA 1	EXPLORER 15	US	27 OCT	314.8	17.98	17605	317	
B LAMBDA 2	ROCKET BODY	US	27 OCT	INSUFFICIENT OBSERVATIONS				
B MU 1	ANNA 1B	US	31 OCT	107.8	50.15	1172	1088	162; 324
B MU 2	ROCKET BODY	US	31 OCT	107.5	50.13	1146	1086	
B TAU 1		US	13 DEC	114.9	70.36	2672	227	
B TAU 2		US	13 DEC	115.6	70.40	2727	233	136.860 \$
B TAU 3	INJUN 3	US	13 DEC	103.4	70.31	1622	218	
B TAU 4		US	13 DEC	114.2	70.37	2600	233	
B TAU 5		US	13 DEC	114.9	70.37	2620	275	
B TAU 6		US	13 DEC	115.4	70.33	2713	234	
B UPSILON 1	RELAY 1	US	13 DEC	185.0	47.52	7442	1320	136.140
B UPSILON 2	ROCKET BODY	US	13 DEC	184.8	47.46	7451	1294	

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>PERIOD</u>	<u>INCLI- NATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>	
1962 LAUNCHES									
B CHI 1	EXPLORER 16	US	16 DEC	104.3	52.00	1186	744	136.860;136.200 \$	
B PSI 1	TRANSIT 5A	US	19 DEC	99.2	90.61	742	689		
B PSI 2		US	19 DEC	97.9	90.72	735	575		
B PSI 3		US	19 DEC	99.1	90.63	742	688		
B PSI 4		US	19 DEC	100.3	90.49	824	715		
INTERNATIONAL									
<u>DESIGNATION</u>	<u>NASA CODE</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>PERIOD</u>	<u>INCLI- NATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1963 4A	1963 N1A	SYNCOM	US	14 FEB	1426.5	33.51	36974	34228	
1963 4B	1963 N1B	ROCKET BODY	US	14 FEB	606.0	33.12	34435	271	
1963 9A	1963 N2A	EXPLORER 17	US	3 APR	96.4	57.59	922	249	136.560;136.317 \$
1963 9B	1963 N2B	ROCKET BODY	US	3 APR	96.2	57.59	911	248	

* APHELION, PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

** ONE HUNDRED AND EIGHTY FOUR METAL OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1961 OMICRON 1 AND 1961 OMICRON 2. OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED OBJECTS LISTS.

\$ TRANSMITTING ON COMMAND ONLY.
& TRANSMITTING WHEN IN SUN LIGHT ONLY.